

In the Claims:

Please cancel claims 1-24 without prejudice.

Please add new claims 25-45 as follows:

25. (New) An isolated nucleic acid comprising a nucleic acid sequence which encodes a domain of a ramoplanin nonribosomal peptide synthetase, wherein said ramoplanin nonribosomal peptide synthetase comprises an amino acid sequence of SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15 or SEQ ID NO: 18.
26. (New) The isolated nucleic acid of claim 25, wherein said domain is a condensation domain, an adenylation domain, a thiolation domain or a thioesterase domain.
27. (New) The isolated nucleic acid of claim 25 wherein said ramoplanin nonribosomal peptide synthetase comprises an amino acid sequence of SEQ ID NO: 13.
28. (New) The isolated nucleic acid of claim 25 wherein said ramoplanin nonribosomal peptide synthetase comprises an amino acid sequence of SEQ ID NO: 14.
29. (New) The isolated nucleic acid of claim 25 wherein said ramoplanin nonribosomal peptide synthetase comprises an amino acid sequence of SEQ ID NO: 15.
30. (New) The isolated nucleic acid of claim 25 wherein said ramoplanin nonribosomal peptide synthetase comprises an amino acid sequence of SEQ ID NO: 18.

31. (New) The isolated nucleic acid of claim 26, wherein said condensation domain comprises an amino acid sequence selected from the group consisting of: amino acids 1-470 of SEQ ID NO: 13; amino acids 1-517 of SEQ ID NO: 14, amino acids 1106-1560 of SEQ ID NO: 14; amino acids 2159-2618 of SEQ ID NO: 14; amino acids 3237-3697 of SEQ ID NO: 14; amino acids 4241-4718 of SEQ ID NO: 14; amino acids 5307-5754 of SEQ ID NO: 14; amino acids 5838-6317 of SEQ ID NO: 14; amino acids 1-470 of SEQ ID NO: 15; amino acids 1109-1567 of SEQ ID NO: 15; amino acids 2122-2602 of SEQ ID NO: 15; amino acids 3212-3671 of SEQ ID NO: 15; amino acids 4217-4698 of SEQ ID NO: 15; amino acids 5317-5776 of SEQ ID NO: 15; amino acids 6363-6839 of SEQ ID NO: 15 and amino acids 7458-7925 of SEQ ID NO: 15.
32. (New) The isolated nucleic acid of claim 26, wherein said adenylation domain comprises an amino acid sequence selected from the group consisting of: amino acids 471-959 of SEQ ID NO: 13; amino acids 518-990 of SEQ ID NO: 14; amino acids 1561-2052 of SEQ ID NO: 14; amino acids 2619-3122 of SEQ ID NO: 14; amino acids 3698-4160 of SEQ ID NO: 14; amino acids 4179-5192 of SEQ ID NO: 14; amino acids 6318-6804 of SEQ ID NO: 14; amino acids 487-993 of SEQ ID NO: 15; amino acids 1568-2041 of SEQ ID NO: 15; amino acids 2603-3095 of SEQ ID NO: 15; amino acids 3672-4135 of SEQ ID NO: 15; amino acids 4699-5199 of SEQ ID NO: 15; amino acids 5777-6280 of SEQ ID NO: 15; amino acids 6840-7343 of SEQ ID NO: 15 and amino acids 7296-8380 of SEQ ID NO: 15.
33. (New) The isolated nucleic acid of claim 26, wherein said thiolation domain comprises an amino acid sequence selected from the group consisting of amino acids 961-1030 of SEQ ID NO: 13; amino acids 991-1059 of SEQ ID NO: 14; amino acids 2054-2122 of SEQ ID NO: 14; amino acids 3123-3191 of SEQ ID

NO: 14; amino acids 4161-4228 of SEQ ID NO: 14; amino acids 5193-5260 of SEQ ID NO: 14; amino acids 5755-5824 of SEQ ID NO: 14; amino acids 6805-6873 of SEQ ID NO 14; amino acids 994-1062 of SEQ ID NO: 15; amino acids 2042-2110 of SEQ ID NO: 15; amino acids 3097-3165 of SEQ ID NO: 15; amino acids 4136-4202 of SEQ ID NO: 15; amino acids 5200-5268 of SEQ ID NO: 15; amino acids 6281-6350 of SEQ ID NO: 15; amino acids 7344-7411 of SEQ ID NO: 15 and amino acids 8381-8449 of SEQ ID NO: 15.

34. (New) The isolated nucleic acid of claim 26, wherein said thioesterase domain comprises an amino acid sequence of amino acids 8450-8695 of SEQ ID NO. 15.
35. (New) The isolated nucleic acid of claim 27, wherein said nucleic acid sequence encodes an amino acid sequence selected from the group consisting of : amino acids 1-470 of SEQ ID NO. 13, amino acids 471-959 of SEQ ID NO. 13 and amino acids 961-1030 of SEQ ID NO. 13.
36. (New) The isolated nucleic acid of claim 28, wherein said nucleic acid sequence encodes an amino acid sequence selected from the group consisting of: amino acids 1-517 of SEQ ID NO: 14; amino acids 518-990 of SEQ ID NO: 14; amino acids 991-1059 of SEQ ID NO: 14; amino acids 1106-1560 of SEQ ID NO: 14; amino acids 1561-2052 of SEQ ID NO: 14; amino acids 2054-2122 of SEQ ID NO: 14; amino acids 2159-2618 of SEQ ID NO: 14; amino acids 2619-3122 of SEQ ID NO: 14; amino acids 3123-3191 of SEQ ID NO: 14; amino acids 3237-3697 of SEQ ID NO: 14; amino acids 3698-4160 of SEQ ID NO: 14; amino acids 4161-4228 of SEQ ID NO: 14; amino acids 4241-4718 of SEQ ID NO: 14; amino acids 4719-5192 of SEQ ID NO: 14; amino acids 5193-5260 of SEQ ID NO: 14; amino acids 5307-5754 of SEQ ID NO: 14; amino acids 5755-5824 of SEQ ID NO: 14; amino acids 5838-6317 of SEQ ID NO: 14; amino acids 6318-6804 of SEQ ID NO: 14 and amino acids 6805-6873 of SEQ ID NO: 14.

37. (New) The isolated nucleic acid of claim 29, wherein said nucleic acid sequence encodes an amino acid sequence selected from the group consisting of: amino acids 1-486 of SEQ ID NO: 15; amino acids 487-993 of SEQ ID NO: 15; amino acids 994-1062 of SEQ ID NO: 15; amino acids 1109-1567 of SEQ ID NO: 15; amino acids 1568-2041 of SEQ ID NO: 15; amino acids 2042-2110 of SEQ ID NO: 15; amino acids 2122-2602 of SEQ ID NO: 15; amino acids 2603-3095 of SEQ ID NO: 15; amino acids 3097-3165 of SEQ ID NO: 15; amino acids 3212-3671 of SEQ ID NO: 15; amino acids 3672-4135 of SEQ ID NO: 15; amino acids 4136-4202 of SEQ ID NO: 15; amino acids 4217-4698 of SEQ ID NO: 15; amino acids 4699-5199 of SEQ ID NO: 15; amino acids 5200-5268 of SEQ ID NO: 15; amino acids 5317-5776 of SEQ ID NO: 15; amino acids 5777-6280 of SEQ ID NO: 15; amino acids 6281-6350 of SEQ ID NO: 15; amino acids 6363-6839 of SEQ ID NO: 15; amino acids 6840-7343 of SEQ ID NO: 15; amino acids 7344-7411 of SEQ ID NO: 15; amino acids 7458-7925 of SEQ ID NO: 15; amino acids 7926-8380 of SEQ ID NO: 15; amino acids 8381-8449 of SEQ ID NO: 15; and amino acids 8450-8695 of SEQ ID NO: 15.
38. (New) The isolated nucleic acid of claim 27, wherein said nucleic acid comprises a coding sequence identical to or complementary to nucleotides 15880-19035 of SEQ ID NO: 1 or a sequence that encodes an amino acid sequence of SEQ ID NO: 13.
39. (New) The isolated nucleic acid of claim 28, wherein said nucleic acid comprises a coding sequence identical to or complementary to nucleotides 19032-39713 of SEQ ID NO: 1 or a sequence that encodes an amino acid sequence of SEQ ID NO: 14.

40. (New) The isolated nucleic acid of claim 29, wherein said nucleic acid comprises a coding sequence identical to or complementary to nucleotides 39713-65800 of SEQ ID NO: 1 or a sequence that encodes an amino acid sequence of SEQ ID NO: 15.
41. (New) The isolated nucleic acid of claim 30, wherein said nucleic acid comprises a coding sequence identical to or complementary to nucleotides 67384-70059 of SEQ ID NO: 1 or a sequence that encodes an amino acid sequence of SEQ ID NO: 18.
42. (New) The isolated nucleic acid of claim 1, wherein said nucleic acid is identical to or complementary to SEQ ID NO: 1.
43. (New) An expression vector comprising a nucleic acid of claim 25.
44. (New) A host cell transformed with an expression vector of claim 43.
45. (New) A method of preparing ramoplanin or an analog thereof, comprising transforming a host cell with an expression vector of claim 43, culturing said host cell under conditions such that a ramoplanin synthase is produced and catalyzes the synthesis of said ramoplanin or analog thereof.